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SUBJECT: Authorization for Release of Technical Information, Control Number: AFRL-PR-ED-AB-2000-190 Suri, Suresh; Tinnirello, Michael (ERC); Marcischak, Jacob (ERC), "Synthesis and Screening of Advanced Hydrocarbon Fuels"

HEDM Contractors Conference (Park City, UT, 23-26 Oct 2000) (Deadline: 27 Sep 2000 – PAST DUE)

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Synthesis and Screening of Advanced Hydrocarbon Fuels

Suresh C. Suri*, Michael Tinnirello¹ and Jacob Marcischak¹
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At AFRL/PRSP research efforts have been directed towards high-density saturated/unsaturated strained ring hydrocarbons. The theoretical specific impulse (Isp) calculation reflected that hydrocarbons AFRL-1 (Isp = 311.4 sec), AFRL-2 (Isp = 307 sec), AFRL-3 (Isp = 307.2 sec), AFRL-4 (Isp = 321 sec) and AFRL-5 (Isp = 308.7 sec) outperform the current candidates. The synthesis of AFRL-1, AFRL-3 and AFRL-5 and their physical & hazardous properties shall be discussed.

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